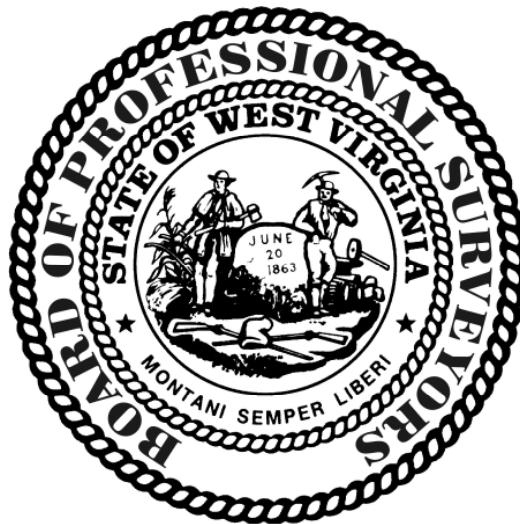


STATE OF WEST VIRGINIA
BOARD OF PROFESSIONAL SURVEYORS

WEST VIRGINIA
SURVEYING EXAMINATION
CANDIDATE HANDBOOK



JANUARY 2011

INTRODUCTION

The West Virginia Board of Professional Surveyors (WVBPS) is responsible for developing and administering the West Virginia Land Surveying Examination for candidates seeking licensure as professional land surveyors. The WVBPS devotes substantial time and effort in developing a state-specific examination that is a valid measure of competency related to the practice of surveying. Public protection is enhanced in that competent candidates have a greater chance of passing the examination.

The WVBPS Examination is a 60 question, closed-book, multiple-choice exam. The examination is given in April and October and is the result of careful preparation by the WVBPS with input from many professional land surveyors. These land surveyors supply the content expertise essential in developing a fair and impartial examination for measuring entry level competency in the profession.

In addition, the WVBPS requires that candidates pass the Fundamentals of Surveying (FS) and the Principles and Practice of Surveying (PS) Examinations prepared by the National Council of Examiners for Engineering and Surveying (NCEES).

This candidate handbook is designed to help you prepare for the WVBPS Examination. We hope you find the information useful. Additional reference material is listed in this handbook. We extend our best wishes for success on this examination and in the practice of land surveying.

DESCRIPTION OF EXAMINATION

Examination Content

The following knowledge areas will be the principal areas from which examination questions will be obtained. Questions from other areas may occasionally appear on the examination.

West Virginia Land Surveying Test Blueprint

A. **West Virginia Statutes** - www.legis.state.wv.us > WV Code

1. *General Provision Respecting Officers* - County Surveyor - Chapter 6-2 & 7-3
2. *Land Use Planning* - Subdivisions - Chapter 8A-5 & 6
3. *Roads & Highways* – Roads & Right-of-Ways - Chapter 17-1 & 4
4. *Environmental Resources* - Oil & Gas – Chapter 22
5. *Miners' Health, Safety and Training* - Mines & Minerals - Chapter 22A
6. *Professions and Occupations* - Licensing - Chapter 30-13A
7. *Uniform Common Interest Ownership Act* - Chapter 36B-2-109 through 114
8. *Real Property* - Chapter 37-5-2 (Adjoining Owners)
Chapter 37-12-1 & 2 (Magnetic Meridian)
9. *Liens* - Chapter 38
10. *Records and Papers* - Chapter 39
11. *Acts Void as to Creditors and Purchasers* – Recording – Chapter 40-1-9
12. *Actions, Suits, and Arbitration* - Chapter 55-2 & 4
13. *Crimes and Their Punishment* - Chapter 61-3B-1 (Trespass)
Chapter 61-3-30 (Destruction)
15. *The State and its Subdivisions* - State Plane Coordinate System - Chapter 1-1-5

B. West Virginia Code of State Rules - Title 23 - www.sos.wv.gov -or- www.wvbps.com

23CSR1 – *Examination and Licensing of Professional Surveyors in West Virginia, (2008)*

23CSR2 – *Mandatory Continuing Education for Land Surveyors, (2004)*

23CSR3 – *Disciplinary and Complaint Procedures for Land Surveyors, (2001)*

23CSR4 – *Fees for Surveyors and Surveying Firms in West Virginia, (2008)*

23CSR5 – *Standards for the Practice of Surveying in West Virginia, (2008)*

C. Retracement Procedures & Practices

1. Magnetic Bearings
2. Magnetic Declination
3. Secular Change
4. Conversion for Different Meridians (Meridian Rotation)
5. Slope and Horizontal Distances
6. Historical Practices & Procedures
7. Research & Records
8. Monument Identification
9. Description Interpretation
10. Dendrology

D. Case Law

1. Retracement of Rural Boundaries
2. Retracement of Subdivision Lot Boundaries
3. Rivers and Streams
4. Roads and Streets
5. Rights-of-way and Easements
6. Establishment of Boundaries by Unwritten Methods

E. West Virginia Court System

1. Structure of Court System
2. Judicial Proceedings

F. Land Development

1. Hydrology and Drainage
2. Flood Plains and Wetlands
3. Regulatory Permits

TEST DEVELOPMENT / REVIEW

Sample questions for the WVBPS Examination are presented on page 8. The sample questions do not make up a complete examination. However, they do illustrate the general format and should be helpful in your preparation for the examination.

Committees of land surveyors carefully review each question in the examinations before as well as after they are used on a test. This process ensures the quality and fairness of the examination. These land surveyors represent the current practicing profession in West Virginia.

Scoring Procedures

Scores are calculated by summing the number of correct responses within an examination. Credit is given for correct responses while no points are received for incorrect responses. Consequently, candidates should answer each question. Only one response should be marked for each question. Answers that contain two or more marked responses or are all blank (i.e., omitted questions) are scored as incorrect. Candidates are not graded on a curve. The total number of correct responses is converted to a percentage (42 correct responses = 70%). Candidates receiving a score of 70% or higher pass the WVBPS Examination.

TAKING THE EXAMINATION

Distribution

Proctors will distribute the test booklet and answer sheet. Listen to all instructions carefully. Special attention should be given to the information on the front of the booklet. Copying, reproduction, or any action taken to reveal the contents of the examination in whole or part is unlawful. Copying questions or removing test booklets from the examination room is prohibited.

Answer Sheets

To ensure proper scoring of your examination, it is imperative that you listen to the proctor's instructions and read the instructions printed on the answer sheet. Use only #2 mechanical pencils provided by the proctors. Marks in ink or felt-tip pens will not be scanned properly. For proper scoring, the answer spaces must be blackened completely.

Select the best answer from the four choices. No credit is given for multiple answers. If you decide to change an answer, erase the first answer completely. Incomplete erasures and stray marks may be read as intended answers. NOTE: Your sketches, notes and calculations are NOT considered to be part of your answer and are not inspected or graded. All work, however, must be turned in with your test booklet.

Starting and Completing the Exam

Do not open the examination booklet until instructed to do so by your proctor. You are responsible for returning the numbered examination booklet assigned to you.

References

The WVBPBPS state-specific exam is a closed-book examination; no references are permitted. Calculators are permitted, but must be on the NCEES approved calculator list (www.ncees.org). Remember that you have 60 multiple-choice questions to complete within 2 hours. Familiarity with the reference material should allow sufficient time to complete the examination.

The examination questions are primarily developed from the references listed below. It is to your advantage to spend time learning and reviewing current, relevant material.

West Virginia Code, <http://www.legis.state.wv.us/WVCODE/Code.cfm>

West Virginia Code of State Rules – Title 23, Series 1,2,3,4,5
<http://apps.sos.wv.gov/adlaw/csr/index.aspx>

Evidence and Procedures for Boundary Location, Brown, Robillard, and Wilson, Fourth Edition, John Wiley & Sons, Inc., New York, NY, (2002).

Brown's Boundary Control and Legal Principles, Brown, Robillard, and Wilson, Fifth Edition, John Wiley and Sons, Inc., Hoboken, NJ, (2003).

Writing Legal Descriptions in Conjunction with Survey Boundary Control, Gurdon H. Wattles, Wattles Publications, Tustin, CA. (1979).

Black's Law Dictionary, Bryan A. Garner, Current Edition, West & Thomson, St. Paul, MN, <http://west.thomson.com>.

Erosion and Sediment Control Handbook for Urban Areas (West Virginia), U.S. Department of Agriculture, Soil Conservation Service, P.O. Box 865, Morgantown, WV 26505, (1974).

FEMA Floodplain Regulations, www.fema.gov

Corps of Engineers Wetlands Delineation Manual, U.S. Department of the Army, Vicksburg, MS, www.wetlands.com/pdf/wdm0225e.pdf, (1987).

Forestry Handbook, edited by Carl F. Wenger, Second Edition, John Wiley & Sons, Inc., <http://books.google.com/books>, (1984).

NOAA Manual NOS NGS 5 – State Plane Coordinate System of 1983, James E. Stern, [www.ngs.noaa.gov/PUBS LIB/ManualNOSNGS5.pdf](http://www.ngs.noaa.gov/PUBS_LIB/ManualNOSNGS5.pdf), (reprinted 1995)

Technical Release No. 55 – Urban Hydrology for Small Watersheds, NRCS, U.S. Department of Agriculture, Soil Conservation Service, Second Edition, www.hydrocad.net/tr-55.htm, (1986).

Drainage Manual, West Virginia Department of Highways, Engineering Division,
www.transportation.wv.gov/highways/engineering/Manuals/Drainage/WVDOH_2007_Drainage_Manual.pdf, (2007)

Sewer Systems 64CSR9 - West Virginia Code of State Rule, West Virginia Division of Health, <http://apps.sos.wv.gov/adlaw/csr/rule.aspx?rule-64-09>, (1998).

*Compass Land Surveying, F. Henry Sipe, McClain Printing Company, Parsons, WV, (1974).

*West Virginia Land Surveyor's Laws and Regulations, published by the Michie Company, 1991 (*Note: Laws have not been updated since 1991; however, book contains relevant case law*).

*Examination Review Manual, prepared by WVSPS in conjunction with Glenville State College.

*West Virginia Code as Related to Professional Surveyors, prepared by Charles R. Sybolt, Professor, Glenville State College, (2010).

*Exploring the Old Turnpikes of West Virginia, published by WVSPS.

*Boundaries in West Virginia Roads and Streams, Knud E. Hermansen, (1987).

*Mechanics' Liens for Land Surveyors, Phillip A. Reale, Esq and Robert L. Coffield, Esq, (1994).

Note: * Check availability through the West Virginia Society of Professional Surveyors:

West Virginia Society of Professional Surveyors
2007 Quarrier Street
Charleston, West Virginia 25311
(304) 720-3299 phone wvsps@wvsps.org (e-mail)
(304) 345-3214 fax www.wvsps.org (website)

Special Accommodations

If you require special accommodations in the test-taking procedure because of a documented disability, communicate your need well before the examination to the:

West Virginia Board of Professional Surveyors
416 Airport Road, Suite 1
Sutton, West Virginia 26601-9740
(304) 765-0315 phone wvbps@wv.gov (email)
(304) 765-0316 fax www.wvbps.com (website)

Sample Questions

1.

Which of the following terms correctly defines the State Plane Coordinate System in West Virginia based on the National Geodetic Survey's North American Datum of 1983?

- A) State Plane Coordinate System NAD83
- B) West Virginia Coordinate System of 1983
- C) Clark's Ellipsoidal Projection of 1866
- D) World Geographic System of 1983

2.

What type of survey in West Virginia requires the surveyor to prepare a plat and description?

- A) mortgage/loan inspection survey
- B) topographic survey
- C) any property boundary survey
- D) any cadastral survey

3.

When the deed calls of two adjoining properties are determined to overlap, senior rights are held by:

- A) the owner of the property whose title chain includes a grant or deed recorded earlier than any found in the title chain of the other owner.
- B) whichever of the present owners first acquired his land.
- C) the landowner who is the oldest.
- D) whichever of the landowners first has his/her property surveyed and properly records the plat of that survey.

Answer Key for Sample Questions

- 1. B
- 2. C
- 3. A